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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,589	11/24/2003	Thomas Weyand	164319-00027	5022

3705 7590 09/22/2005

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PITTSBURGH, PA 15219

EXAMINER

SPITZER, ROBERT H

ART UNIT	PAPER NUMBER
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1724

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/720,589

Applicant(s)

WEYAND ET AL.

Examiner

Robert H. Spitzer

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1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/9/2004</u> . | 6) <input type="checkbox"/> Other: ____  |

### DETAILED ACTION

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 is indefinite because there is no direct antecedent basis for the recitations of "said powdered activated carbon containing exhaust gas" in line 7, and "said separated powdered activated carbon" in line 12. Applicants are reminded that when "said" is being used, that the identical language being referred to must have been previously used. Claim 3 is indefinite because there is no direct antecedent basis for the recitation of "said desorption", and because the claim recites "a temperature" without any correlation/distinction to "an elevated temperature" already recited in claim 1. Claim 4 is indefinite because there is no direct antecedent basis for the recitation of "said desorption". Claim 6 is indefinite because there is no direct antecedent basis for the recitations of "said desorbed powdered activated carbon", "the combustion chamber", and "said coal fired process plant". Claim 7 is indefinite because there is no direct antecedent basis for the recitation of "said process", and because the claim recites "mercury containing exhaust gas" without any correlation/distinction to the "coal fired power plant exhaust gas" already recited in claim 1. Claim 8 is indefinite because there is no direct antecedent basis for the recitation of "said fine particle filter removal". Claim 10 is indefinite because there is no direct antecedent basis for the recitation of "said coarse particle filter", and because there is

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no correlation between "ash" and the "coarse particles" already recited in claim 7. Claim 11 is indefinite because there is no direct antecedent basis for the recitation of "said process". Claim 14 is indefinite because there is no direct antecedent basis for the recitations of "said coarse particle filter" in lines 5,7 and 13, and "said powder activated carbon" in line 12. Claims 15 and 16 are indefinite because there is no direct antecedent basis for the recitation of "said desorption unit". Claim 17 is indefinite because there is no direct antecedent basis for the recitation of "said desorption". Claim 18 is indefinite because there is no direct antecedent basis for the recitation of "said mercury and inert gas separation unit". Claim 20 is indefinite because there is no direct antecedent basis for the recitation of "said coarse particle filter", and because the claim recites "to remove ash" without any correlation to "removing coarse particles" already recited in claim 14. Claim 21 is indefinite because there is no direct antecedent basis for the recitation of "said coarse particle filter". Claim 22 is indefinite because there is no direct antecedent basis for the recitation of "the combustion unit". Claims 2,5,9,12,13,19 and 23-25 are indefinite because they depend from the above indefinite claims.

3. Claims 1-25 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

4. The references listed on both the PTO-1449 and the PTO-892 show art of interest only, over which the claims define allowable subject matter.

5. Applicants' response to this Office action should also include the following editorial changes: page 1, lines 22,30 and 31, "flu" should be "flue"; page 1, line 25, the second occurrence of "a" should be deleted; page 1, line 26, "4,889,498" should be

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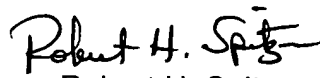
"4,889,698"; page 1, line 26, "patent" should be "Patents"; page 1, line 29, "200201124725" should be "20020124725"; page 1, line 32, "patent" should be "Patent"; page 2, lines 2,8 and 9, "patent" should be "Patents"; page 2, lines 4 and 11, "patent" should be "Patent"; and, page 5, line 2, "storum" should be "stream".

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert H. Spitzer whose telephone number is (571) 272-1167. The examiner can normally be reached on Monday-Thursday from (5:30AM-4:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 14, 2005

  
Robert H. Spitzer  
Primary Examiner  
Art Unit 1724

September 14, 2005